



A REPORT
TO THE
MONTANA
LEGISLATURE

PERFORMANCE AUDIT

Weed Management at State Parks and Fishing Access Sites

*Department of Fish, Wildlife
and Parks*

DECEMBER 2008

LEGISLATIVE AUDIT
DIVISION

08P-11

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We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Members of the performance audit staff hold degrees in disciplines appropriate to the audit process. Areas of expertise include business and public administration, journalism, accounting, economics, sociology, finance, political science, english, anthropology, computer science, education, international relations/security, and chemistry.

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December 2008

The Legislative Audit Committee
of the Montana State Legislature:

This is our performance audit of Department of Fish, Wildlife and Parks (department) weed management at state parks and fishing access sites. The Parks Division (division) within the department is responsible for weed management on these lands.

This report provides the legislature information about weed management activities by the Parks Division. This performance audit also examined the department's compliance with the good neighbor policy found in section 23-1-126, MCA, which has a goal of no impacts on lands adjoining state parks and fishing access sites. The department has controls in place to manage weeds and mitigate the impacts of weeds on adjoining lands. This report also presents recommendations for improving weed management controls on state park and fishing access site lands.

We wish to express our appreciation to the Department of Fish, Wildlife and Parks personnel for their cooperation and assistance during the audit.

Respectfully submitted,

/s/ Tori Hunthausen

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Montana Fish, Wildlife and Parks Commission

		<u>Term Expires</u>
Steve Doherty, Chairman	Great Falls	2009
Shane Colton, Vice Chairman	Billings	2009
Willie Doll	Malta	2011
Dan Vermillion	Livingston	2011
Victor Workman	Whitefish	2009

REPORT SUMMARY

Weed Management at State Parks and Fishing Access Sites

The Department of Fish, Wildlife and Parks has controls to manage weeds on state parks and fishing access sites. The audit identified areas for improving the department's weed management efforts.

Audit Findings

The Parks Division (division) within the Department of Fish, Wildlife and Parks (department) is responsible for management of Montana's state parks and fishing access sites (FAS). This performance audit focused on the department's weed control and management efforts on those lands.

To evaluate weed management activities, we interviewed department personnel, county weed district officials, and personnel from other state and federal land management agencies. We also accompanied county weed officials on site visits to state parks and FAS and used their expertise to estimate the extent of weed infestations in two department regions. County weed officials estimated potential impacts from state parks and FAS on adjoining lands. We concluded the department has controls in place to manage weeds and promote compliance with the good neighbor policy, which statutorily seeks a goal of no impacts on adjoining lands from impacts such as weeds.

Weed Infestation Rating for Department Regions 2 and 3 State Parks and FAS October 2008

Rating	# of Sites	Percent
No Weeds Observed	11	18%
10% or less	44	73%
10% to 25%	3*	5%
25% to 50%	1*	2%
More than 50%	0	0%
Not Determined ¹	1	2%
Total	60	100%

¹ One state park was being inventoried by the division and information was not available.

* All FAS

Source: Compiled by the Legislative Audit Division.

Audit Recommendations

We also determined the department can improve its weed management efforts. The following bullets highlight audit findings and recommendations.

- ♦ **Prioritize weed inventories.** Division staff informally inventory weeds to identify the location and size of weed infestations, but do not formally document their inventories for monitoring and evaluation purposes. The department and

the Montana Department of Agriculture have a cooperative agreement to fund a weed intern to inventory weeds at FAS. However, at the current rate it will take the department approximately eight years to have a completed inventory for FAS. Also, the department has conducted minimal weed inventory efforts at state parks. We recommend the department increase its weed inventory efforts to benefit monitoring and evaluation of weed infestations at state parks and FAS.

- ♦ **Update regional weed management plans.** Regional weed management plans are six or more years old and are outdated. The department should update regional weed plans to reflect the department's 2008 statewide weed management plan and increase consistency among the department's seven administrative regions.
- ♦ **Implement on-site weed management evaluations.** The department relies on informal controls to monitor and evaluate weed management efforts. The department should implement weed reviews of selected state parks and FAS, and include system stakeholders in the review process. This would help the department to better monitor and measure the effectiveness of weed management efforts and improve accountability to the Montana Department of Agriculture and the legislature.
- ♦ **Educate and formalize funding processes.** The department maintains fund reserves for unexpected maintenance activities, including weed control. However, some regional personnel were unaware of or reluctant to request additional funds for unexpected weed control costs. There appeared to be a breakdown in communication between some regions and headquarters in Helena. The department should educate and communicate to regional personnel the availability of reserve funds for unexpected weed control costs and establish a process for requesting and prioritizing disbursement of these funds.
- ♦ **Obtain county weed district inspections of proposed land acquisitions.** State law requires the department to obtain weed inspections by county weed district officials before obtaining new lands for state parks and FAS. While the department conducted environmental assessments, which included an assessment of weed conditions, it does not comply with state law. The department should obtain and document weed inspections by county weed district officials to comply with state law.

Chapter I – Introduction

Introduction

Noxious weeds are a statewide problem. For example, the Montana Department of Agriculture's (MDA) annual report states knapweed in Montana costs the state an estimated \$40 million annually. The 2007 Legislature passed House Joint Resolution 35 (HJR 35) requesting the Legislative Audit Committee prioritize a performance audit of the Department of Fish, Wildlife and Parks (department) weed management program. HJR 35 specifically requested a performance audit examine department compliance with the "good neighbor" policy in state law in terms of weed impacts on adjoining lands.

Section 23-1-126, MCA, in part states the good neighbor policy as applied to public recreational lands "...seeks a goal of no impact upon adjoining private and public lands by preventing impact on those adjoining lands from noxious weeds, trespass, litter, noise and light pollution, streambank erosion, and loss of privacy." Additionally, the good neighbor policy requires the department "to place maintenance as a priority over additional development at all state parks and fishing access sites." Within the department, the Parks Division (division) manages state parks and fishing access sites (FAS) encompassing more than 53,723 acres.

Audit Objectives, Methodologies, and Scope

To examine division management of noxious weeds, we developed four objectives:

1. Determine if the department has controls in place to evaluate the effectiveness of its weed control efforts.
2. Determine if the department complies with the legislature's good neighbor policy for state parks and fishing access sites.
3. Determine if the department prioritizes weed management over development as required in state law.
4. Determine if the department obtains weed inspections from county weed officials before acquiring new lands for state parks and FAS.

To address these four objectives, we conducted the following work to review weed management at state parks and FAS.

- ♦ Reviewed state laws and administrative rules related to department weed management activities.
- ♦ Reviewed the department's statewide and regional weed management plans.
- ♦ Reviewed department development and weed management expenditures for state parks and FAS.

- ♦ Reviewed department property acquisition information to test compliance with state law requiring county weed official inspections of proposed state park and FAS acquisitions.
- ♦ Reviewed Montana Department of Agriculture's statewide weed management plan.
- ♦ Interviewed department and regional personnel about weed control monitoring efforts.
- ♦ Interviewed the MDA state weed control coordinator.
- ♦ Interviewed county weed coordinators about department weed management efforts.
- ♦ Interviewed a representative of the Montana State University extension service regarding weed management methodologies and systems.
- ♦ Attended a county weed board meeting related to Parks Division weed management efforts.
- ♦ Interviewed federal and state agency land managers regarding weed management methods.
- ♦ Interviewed and accompanied the MDA weed intern who is mapping weeds on FAS.
- ♦ Interviewed Natural Resource and Conservation Service (NRCS) personnel about weed monitoring practices for participants in a federal weed management program.
- ♦ Reviewed the division's weed status reports for state parks and FAS.
- ♦ Interviewed other states' personnel about weed management activities and measures of effectiveness.

We also visited 11 state parks and 49 FAS in Regions 2 and 3 to examine the division's weed management activities. We selected these two regions because they have the most state parks and FAS and visitor numbers. County weed coordinators accompanied us to state parks and FAS to estimate weed infestations at state parks and FAS. County weed coordinators also estimated weed conditions on adjoining lands to examine compliance with the good neighbor policy.

Report Organization

The remainder of this report is organized into three chapters. Chapter II provides background information about department's weed management efforts at state parks and FAS. Chapter III presents audit conclusions about these department weed management activities. Chapter IV presents recommendations for improving the department's weed management activities at state parks and FAS.

Chapter II – Background

Introduction

This chapter provides information about the Parks Division (division) within Montana's Department of Fish, Wildlife and Parks (department). The division is responsible for administering 53 state parks and 328 fishing access sites (FAS) as of October 2007.

Montana Department of Agriculture Administers Statewide Weed Management Activities

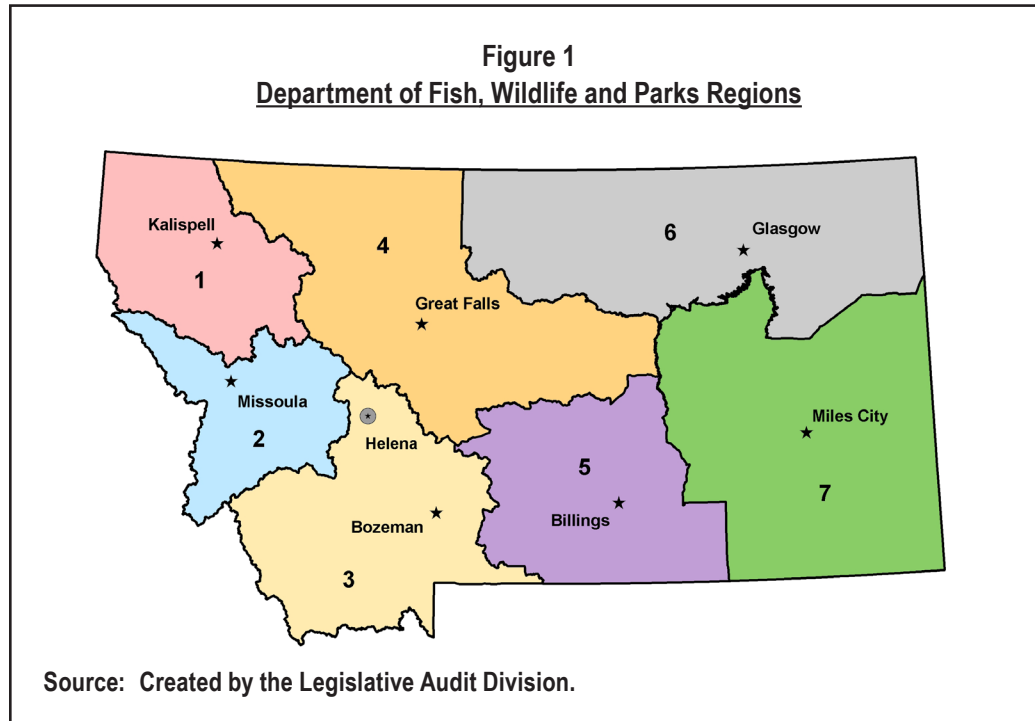
The Montana Department of Agriculture (MDA) has general responsibility for administration and oversight of weed management throughout the state. This includes distributing funds for weed management to eligible entities in Montana. The MDA also publishes the Montana Weed Management Plan. The purpose of the plan is to coordinate private, county, state, and federal weed management efforts in Montana. The plan also includes an overview of Department of Fish, Wildlife and Parks weed management activities and weed management program needs. The Department of Fish, Wildlife and Parks does not receive any weed management funds from MDA.

Parks Division Responsibilities and Goals

The Parks Division manages 53 state parks. Section 23-1-101, MCA, specifies duties and responsibilities for the department, which include conserving recreational resources in the state. The division's goal is to conserve and manage a representative diversity of the state's cultural, historical and recreational amenities, help facilitate sustainable economic development through tourism, and provide resource education and interpretation. The division is also responsible for managing 328 fishing access sites (FAS). FAS provide access to Montana's streams, lakes, and reservoirs and are located in all regions.

Division Organization

The division is organized with department headquarters in Helena and seven administrative regions. Figure 1 shows the department's seven administrative regions and regional offices.



Division headquarters located in Helena is responsible for developing policy for division programs. Regional Parks Division managers are responsible for implementing the division's policies for the seven regions. The department also created the Noxious Weed Management Advisory Committee. This advisory committee includes representatives from the department, regions, MDA, a county weed district, and a state weed management organization.

Expenditures for Weed Management

According to division reports, the division spends over \$200,000 annually on weed management. In fiscal year 2007 the division spent approximately \$216,000 for weed control at state parks and FAS, and in fiscal year 2008 the division spent approximately \$212,000.

The Division Reserves Funds for Unexpected Weed Control Costs

The division also reserves funds for unexpected regional weed control activities. Regions may request additional funding as needed. For example, division management approved one region's request for additional money to pay for aerial weed spraying. The division also uses the reserves to help regions control weeds on newly acquired state parks and FAS acquisitions.

The Division Typically Contracts for Weed Control Services

Regions 3, 4, 5, 6, and 7 primarily contract with county weed districts for weed control efforts such as spraying herbicides. Region 1 uses regional personnel in addition to private contractors for weed management. Region 2 contracts with a private sector company to control weeds. Region 2 management said they prefer using one contractor for the entire region because it provides more consistency in weed control efforts region-wide.

Weed Categories

Montana's Weed Management Plan published by the Montana Department of Agriculture identifies three weed categories, which are:

1. Category 1 – Widespread noxious weeds. This category includes weed species that are widespread across the state, such as spotted knapweed and leafy spurge, which are capable of rapid spread and limit land uses. Weed control efforts focus on containment and suppression of existing infestations and prevention of new infestations.
2. Category 2 – Established new invaders. Weeds in this category are recent introductions to the state and/or are spreading rapidly from current infestations. Weed control efforts include prevention of movement into noninfested areas, monitoring and containment of existing infestations, and eradication where possible.
3. Category 3 – Nonestablished new invaders. Weeds in this category either have not been found or may be found in small, scattered, localized infestations. Weed control efforts include prevention of introduction and movement into noninfested areas, early detection, and eradication.

This classification system is modified and updated as needed by the MDA's Statewide Noxious Weed List Advisory Council.

The Department of Fish, Wildlife and Parks has a Statewide Weed Management Plan

To address its weed management needs, in 2008 the department finalized a statewide weed management plan that applies to all regions. The department's weed plan is based on MDA's statewide weed plan. The department's weed plan sets department goals, objectives, and methodologies for ensuring department weed management activities comply with and implement MDA's weed plan. Department management also stated they want regional weed management plans updated every six years.

Department's Weed Plan Takes an Integrated Approach to Weed Management

The department's weed plan outlines an integrated weed management approach, which identifies methods and strategies for managing weeds on its lands, including state parks and FAS. The following sections highlight key elements of the department's integrated approach to weed management.

Weed Management Priorities

Generally, weed management priorities are based on individual site conditions and available funding. Specific priorities listed in the plan are:

- ♦ Priority 1 – Early detection and rapid control of new invaders and newly established infestations.
- ♦ Priority 2 – Complete control and eradication of established priority weeds occurring as scattered, satellite infestations.
- ♦ Priority 3 – Control of noxious weed seed production in high public use areas to prevent spread of infestations.
- ♦ Priority 4 – Containment and control of relatively large-scale weed infestations in areas with critical habitat or sites adjacent to cooperative weed management areas.

Weed Control Methods

To manage weeds on its lands, the Parks Division uses a number of weed control methods based on site conditions, type and nature of weed infestations, and other factors. The most common methods include:

- ♦ Chemical control – Herbicides sprayed on plants.
- ♦ Mechanical and manual control – Includes a variety of methods such as mowing, weed whips, cultivation and hand-pulling.
- ♦ Cultural controls – Includes a variety of methods such as domestic livestock grazing, fire, and weed cycle disruption.
- ♦ Biological controls – Includes insects and pathogens that stress or kill weeds.

Audit work indicates the division primarily relies on chemical controls, but also utilizes other methods depending on the land parcel. For example, sheep or goats may be used to control certain weed species in areas where chemical controls may damage native or desirable vegetation. Biological controls are becoming used more frequently as part of an ecological approach to weed management.

Weed Control Costs

Weed control costs vary depending on the methods used. The following table provides estimated cost per acre for different weed control methods.

Table 1 <u>Estimated Weed Control Costs Per Acre</u>	
Herbicide - vehicle mounted sprayer	\$80 per acre
Herbicide - backpack or hand-line	\$170 per acre
Herbicide - aerial application	\$35 per acre
Targeted grazing with sheep	\$9.60 per acre
Mechanical - mowing	\$28 per acre
Mechanical - hand-mowing	\$60 per acre
Biological control agents	Not quantified per acre
Source: Compiled by the Legislative Audit Division from the Department's Weed Management Plan.	

Public Education and Outreach

In addition to activities directly related to weed control such as chemical and biological treatments, department weed management efforts include education and outreach. These activities include publicizing the department's role in weed management, engaging the public to assist in weed management efforts, and educating the public about noxious weed impacts to habitat and wildlife values.

Measuring the Effectiveness of Weed Control Efforts

Measuring the effectiveness of weed control activities consists of three activities as described in the following.

1. Inventorying – Inventory activities include documenting weed species present, identifying new invaders, and delineating weed boundaries.
2. Monitoring – Monitoring activities are directed at tracking the status of weeds.
3. Evaluating – Evaluating activities use the data from inventorying and monitoring to determine the effectiveness of weed control efforts.

Challenges to Parks Division Weed Management Efforts

The previous sections in this chapter present management efforts and strategies for weed management on department lands, including state parks and FAS. Audit work also

indicates the Parks Division faces many challenges to weed management. Challenges the division faces include:

- ♦ Weather – Weather, such as wet spring or summer conditions, can affect the effectiveness of weed control efforts or create conditions for rapid growth of weeds.
- ♦ River Flows – Riparian areas restrict the use of some chemicals used to control weeds or require use of more labor intensive efforts such as hand-pulling weeds. Additionally, rivers and streams are byways for weed seed dispersal to other areas.
- ♦ Other Vegetation – Some weed control chemicals cannot be used in some areas because of the risk of killing or damaging good vegetation or trees.
- ♦ County Weed Staff – Some county weed officials said they rely on seasonal staff for weed control. Commonly, seasonal staff are students or have other commitments during the spring and fall that results in less time to actively manage weeds outside the summer months.
- ♦ Weed Seed Banks – Weed seed banks are seeds that remain in the soil and can germinate when conditions for weed growth occur. Weed officials said some weed seeds can remain viable for 15 years or more.
- ♦ Public Use – Parks Division personnel may avoid using chemical treatments when campground or public use areas are occupied because of public concerns about chemicals, or chemical treatments may be restricted to times when there is minimal public use of state parks and FAS.
- ♦ Heavily Infested Adjoining Lands – Department and county officials indicated state parks and FAS surrounded by heavily weed infested private and public lands makes weed control efforts more difficult.

Good Neighbor Policy

Section 23-1-126, MCA, outlines the good neighbor policy for the Parks Division. The good neighbor policy seeks a goal of no impact on adjoining lands by preventing impacts from:

- ♦ Noxious weeds
- ♦ Litter
- ♦ Noise and light pollution
- ♦ Trespass
- ♦ Stream bank erosion
- ♦ Loss of privacy

Statutory language outlining the good neighbor policy also requires the division to “place maintenance as a priority over additional development at all state parks and fishing access sites.” In accordance with House Joint Resolution 35, audit testing was limited to examining weed management and did not examine other potential impacts to adjacent lands which are outlined in the policy.

The Division Uses an Integrated Weed Management Approach

The division uses an integrated weed management approach to weed management activities. An integrated weed management approach is a comprehensive plan that encompasses all of the activities and strategies described in this chapter. Chapter III presents information and conclusions that are the result of our audit work.

Chapter III – Audit Conclusions

Introduction

The 2007 Legislature passed House Joint Resolution 35 (HJR 35) requesting a performance audit to assess the Department of Fish, Wildlife and Parks (department) compliance with the good neighbor policy as specified in section 23-1-126, MCA, and section 23-1-127, MCA. This policy seeks a goal of no impacts on adjoining properties and requires the division to place maintenance as a priority over development at state parks and fishing access sites (FAS). For the purposes of this audit report, weed “management” is one component of maintenance activities at state parks and FAS. This chapter presents information about Parks Division (division) weed management controls and conclusions resulting from our audit work.

Parks Division Weed Management Controls

Our first audit objective was to examine whether the division had controls in place to monitor the effectiveness of its weed control efforts. Audit work indicates the division has controls in place to manage weeds at state parks and FAS. We noted that while a weed management focus is a recent development by the department, we found the Parks Division complies with the good neighbor policy. Division efforts to control and manage weeds include promoting a culture of weed awareness and active efforts to manage weeds at state parks and FAS. The following sections present the results from our examination and conclude on this audit objective.

Parks Division Coordinates With County Weed Officials

Division personnel stated they coordinate weed management activities with county weed officials in the ten counties we visited. Interviews with county weed officials confirmed this coordination occurs. Coordination efforts include annual meetings with county weed officials to discuss weed management efforts, priorities, contract development, and weed control efforts for the year. Additionally, coordination efforts include discussion of weed problems or concerns identified during weed management activities. One county conducts an annual weed summit that includes representatives from the nonfederal and federal land management agencies.

Weed Inventory Efforts Have Increased With Agreement with the Montana Department of Agriculture

The Parks Division and the Montana Department of Agriculture (MDA) have cooperatively hired a summer intern to inventory weeds at FAS. While the intern inventories weeds on FAS, the intern reports to the state weed coordinator at MDA, which provides assurance the intern’s work is an independent review of weed infestations on division lands. Inventory efforts include:

- ♦ Documenting weeds identified at FAS.
- ♦ Using a geographic positioning system (GPS) to mark locations of weeds by species.
- ♦ Estimating the density and area of weed infestations.
- ♦ Providing narrative information about overall weed conditions at FAS.
- ♦ Regional division personnel submit annual weed management reports to division management in Helena, which includes estimates of weed infestations.

Additionally, the department was conducting an inventory of weeds at one state park we visited. While inventory efforts are not yet complete, we believe the information collected will improve the division's ability to monitor and evaluate efforts to control weeds at FAS.

Other Control Efforts

The division also informally monitors and evaluates weed control efforts throughout the year. Regional personnel observe weed conditions during routine maintenance activities at state parks and FAS, such as cleaning latrines or repairing damages to park amenities. When field personnel identify weeds, they may pull weeds, spot spray, or inform regional management of additional weed treatments needed. State park campground hosts also monitor weed conditions and inform division field personnel about their observations.

Audit Testing Noted State Park and FAS Weed Infestations Are Generally Controlled

MDA's 2005 Montana Weed Management Plan indicates approximately nine percent of the lands in Montana are infested with weeds. To determine the level of infestations on state park and FAS lands, we accompanied weed officials in 10 counties to observe 11 state parks and 49 FAS located in Department of Fish, Wildlife and Parks (department) Regions 2 and 3. State parks and FAS were randomly selected for assessment. We asked county weed officials to rate the percent of noxious weeds on each parcel as compared to total area, based on their best estimates. Table 2 reflects the results of our audit assessment.

Table 2
Weed Infestation Rating for Department Regions 2 and 3 State Parks and FAS
October 2008

Rating	# of Sites	Percent
No Weeds Observed	11	18%
10% or less	44	73%
10% to 25%	3*	5%
25% to 50%	1*	2%
More than 50%	0	0%
Not Determined ¹	1	2%
Total	60	100%

¹ One state park was being inventoried by the division and information was not available.

* All FAS

Source: Compiled by the Legislative Audit Division.

As the table indicates, ratings for these two regions found 55 sites (91 percent) had weed infestations of less than 10 percent. Four sites (7 percent), all FAS, had weed infestations from 10 to 50 percent of sites total land area. These results also indicate weed infestations for state parks and FAS in Regions 2 and 3 tend to be consistent with or better than MDA's 9 percent estimate of statewide weed infestations.

Weed Trends at State Parks and FAS Appear to be Decreasing

We also asked county weed officials to rate the trend of weed infestations at state parks and FAS. Again, weed trends are "best estimates" based on their current and historical observations. Table 3 reflects trends of weeds at state parks and FAS visited in Regions 2 and 3.

Table 3
State Parks and FAS Regions 2 and 3 Weed Trends

Trend	# of Sites by Trend	Percent
Increasing Weed Trend	3*	5%
Stable Weed Trend	27	45%
Decreasing Weed Trend	16	27%
Unknown ¹	14	23%
Total	60	100%

¹ County weed officials had no site history and were not able to determine a trend.

* All FAS

Source: Compiled by the Legislative Audit Division.

Table 3 indicates 27 sites (45 percent) had stable weed trends and 16 sites (27 percent) had decreasing weed trends in Regions 2 and 3. We also noted three sites (5 percent), all FAS, had increasing weed trends. County weed officials were unable to estimate weed trends at 14 sites (23 percent) because they did not conduct weed control efforts on these sites and did not have historical information. Parks Division weed management trends indicate weed control efforts in Regions 2 and 3 are successful. However, some sites have increasing weed trends. Chapter IV presents ways to strengthen management efforts.

CONCLUSION

Observations of state parks and FAS in Regions 2 and 3 indicate the Parks Division has processes in place that resulted in weed infestations of ten percent or less and stable or decreasing weed trends. However, we were unable to determine weed trends for 23 percent of the sites because neither county weed officials nor division personnel had baseline information of prior weed conditions.

Department Compliance With the Good Neighbor Policy

Our second audit objective focused on Parks Division compliance with the good neighbor policy. As mentioned in Chapter II, section 23-1-126, MCA, outlines the good neighbor policy. The good neighbor policy seeks a goal of no impact on adjoining lands by preventing impacts from a variety of sources, including weeds. To answer this question, we also requested county weed officials in Regions 2 and 3 to rate the weed infestations on adjoining lands. County weed officials' evaluation of weeds on adjoining

lands was limited to observations from division lands so as not to trespass on private lands. Table 4 shows our comparison of weed infestations on state park and FAS lands to adjoining lands.

Table 4
Comparison of Weed Infestations at State Parks and FAS
and Adjoining Land Ratings

Rating	# of Sites	Percent
Site Weed Infestation Less Than Adjoining Lands	14	23%
Site Weed Infestation Equal to Adjoining Lands	35	58%
Site Weed Infestation More Than Adjoining Lands	10*	17%
Undetermined ¹	1	2%
Total	60	100%

¹ Weed official could not assess adjacent land because of river conditions.

* All FAS

Source: Compiled by the Legislative Audit Division.

Overall, our results indicate 81 percent of state parks and FAS had weed infestations that were equal to or less than adjoining lands. However, ten sites (17 percent), all FAS, had weed infestations greater than adjoining properties. A variety of factors can cause the division to have higher weed infestations than adjoining lands. Farm or pasture lands that are actively managed may be more likely to have lesser weed problems. Other sites may be adjacent to other public lands where there are more active weed control efforts. In some instances, weed control efforts are long-term practices, such as use of biological controls, where results will not be seen for a year or more.

CONCLUSION

In most cases, weed infestations on Regions 2 and 3 Parks Division lands appeared equal to or better than adjoining lands. The division has processes in place to help mitigate the impact of weeds on adjoining properties as required by the good neighbor policy in state law. However, 17 percent of sites we visited had weed infestations greater than adjoining properties.

Division Weed Management Priorities

Section 23-1-127, MCA, requires the division to place maintenance as a priority over development or improvement at state parks and FAS. Statute defines weed control as a maintenance activity as well as a wide range of other activities including placing and cleaning latrines, installing fences or repairing existing fences, garbage and litter removal, erosion control, and streambank stabilization. As noted above, we tested compliance with this statute by accompanying county weed officials to a sample of state parks and FAS. County weed official estimates of weed conditions indicated the department is managing weeds at state parks and FAS. Since our previous conclusions indicated weed infestations are controlled and infestation trends are stable or decreasing at most sites, we found weed maintenance activities at state parks and FAS are being prioritized as needed.

To determine department compliance with statutes governing development and maintenance, we reviewed Parks Division regional development requests for funding for state parks and FAS properties. Our review found most requested “development” projects met the definition of maintenance in section 23-1-127, MCA. For example, placing of latrines, which is defined as a maintenance project, were requested as part of the division’s request for development appropriations in House Bill 5. We also noted proposed development such as building visitor centers or park comfort stations were approved through the legislative appropriation process as required by state law. Based on our review, the division’s expenditures for development are approved by the legislature.

CONCLUSION

The Parks Division complies with the state law requiring maintenance as a priority over development at state parks and FAS. Additionally, development activities at state parks and FAS do not appear to adversely impact weed control efforts.

The Division Can Improve Weed Management Efforts

Audit work also identified some state parks and FAS with weed infestation problems. The following chapter presents information and recommendations for enhancing weed management efforts and compliance with the good neighbor policy.

Chapter IV – Improving Weed Management at State Parks and Fishing Access Sites

Introduction

In Chapter III we concluded the Department of Fish, Wildlife and Parks (department) has controls in place to manage weeds at state parks and FAS and complies with the good neighbor policy. However, we identified a number of areas where the Parks Division (division) can improve its weed management activities. Areas where weed management could be improved include:

- ♦ Weed inventory efforts.
- ♦ Updating regional weed plans.
- ♦ Implementing on-site evaluations to monitor compliance with weed management plans.
- ♦ Improving intra-agency communication.
- ♦ Obtaining weed inspections before purchasing new lands for state parks and FAS.

The following sections discuss these areas in more detail.

Some State Parks and Fishing Access Sites Still have Weed Problems

While weed control efforts appear to be effective at most state parks and fishing access sites (FAS) we visited, some sites appeared to have more extensive weed infestations. For example, three sites from Region 2 were rated as having weed infestations of 10 percent to 50 percent. Comparison of lands adjoining Regions 2 and 3 state parks and FAS indicated ten sites (17 percent) had weed infestations greater than adjoining lands. To improve the division's overall weed management strategy and improve compliance with the good neighbor policy, in state law, we identified methods and approaches to achieve this goal.

Improving Weed Inventory Efforts

Inventorying weeds is the first step of an effective weed management program, providing information on the locations and extent of weed infestations. Weed inventories set the baselines for weed monitoring and evaluation activities. The division primarily relies on informal inventories by Parks Division employees during routine maintenance activities. County weed district personnel also help inventory weeds as part of their weed control activities. However, inventory findings were not formally documented for future weed management efforts.

The department has taken limited steps to inventory weeds at state parks and FAS. Presently, only weeds at FAS are being inventoried. The department's focus on inventorying FAS appears reasonable because they are higher risk sites because of high use and the nature of use. However, limited inventory efforts are occurring at state parks.

Without increasing inventory efforts, we estimate it will take the department approximately eight years to complete inventories at FAS. The current process will provide limited information regarding weed inventories at state parks. This will reduce the effectiveness of the department's inventory efforts. Increasing the department's efforts to focus on weed inventories at all state parks and FAS will benefit the department's weed monitoring and evaluation activities.

RECOMMENDATION #1

We recommend the Department of Fish, Wildlife and Parks prioritize and complete weed inventory efforts at all state parks and fishing access sites.

Updating Regional Weed Plans

Formal weed plans are an essential control component for directing and guiding weed management activities. Each of the department's seven administrative regions has drafted regional weed management plans. However, all regional plans were six or more years old.

Department personnel stated their objective is to update weed management plans every six years. According to the department's statewide weed plan, the plan was developed in part to "improve consistency in weed management activities and priorities across department regions." Outdated weed management plans increase the risk that regions will not fully implement department weed management objectives and priorities, and that there will be increased risk of inconsistencies in the applications of the statewide plan to regional activities.

We identified a number of examples of inconsistencies in weed management activities. For example, the results of the county weed official estimates of weed infestation levels indicated variations in infestations among Regions 2 and 3. Other audit work indicated variations in how the two regions approach weed management efforts. For example, some state parks and FAS had weed informational signs posted at the entrances or kiosks,

while other sites had no weed information signs. According to one regional manager, policy did not allow for weed management signs, although division management knew of no policy that restricted such signing. Use of informational signing is consistent with the department's statewide weed management plan to educate and engage the public in weed management efforts. We also documented differences in regional weed plans that may affect weed management outcomes. While differences in weed infestation levels may be expected because of regional differences, updated weed plans will help ensure consistency of weed management efforts and activities. Additionally, regional weed plans provide criteria for evaluating weed management efforts statewide and among regions.

It has taken the department approximately three years to develop its statewide weed plan. Now that it has been formally adopted, the department should ensure regions update their weed plans to ensure consistency in weed management activities among regions and compliance with the department's statewide weed management plan.

RECOMMENDATION #2

We recommend the Department of Fish, Wildlife and Parks require the seven administrative regions update regional weed management plans in the next year to assure compliance and consistency with the department's statewide weed management plan.

Weed Management Could Be Improved to Assure Compliance With Weed Management Plans

While the department and regions have weed management plans that outline weed management goals, objectives, and strategies, the department does not have a formal system for ensuring compliance with weed management plans and evaluating outcomes of weed management efforts. An effective weed management system requires formal controls to ensure compliance with management plans that set weed management strategies, goals, and objectives.

Other Agencies Rely on Best Management Practices

The Department of Natural Resources and Conservation (DNRC) developed voluntary "best management practices" (BMP) in cooperation with public and private forestry stakeholders. The BMPs are designed to mitigate the impact of forestry practices to water and forested lands. A BMP biennial audit process is used to evaluate the extent voluntary BMPs are applied during forest practices and to determine if BMPs are

effective. The DNRC audit process examines randomly selected timber harvest sites across the state that meet specific selection criteria. The DNRC audit teams include representatives from state and federal land management agencies, the timber industry, private land ownership, and environmental/conservation groups. Previous Legislative Audit Division audit work found this process to be an effective management tool.

The Division Could Implement a Similar Process for State Parks and FAS to Assure Compliance With Weed Management Plans

The division could implement a similar process for determining compliance with department and regional weed management plans. Compliance teams could include department personnel, state and county weed coordinators, state park and FAS user groups, and other stakeholders. On-site evaluations would examine a randomly selected sample of state parks and FAS and be conducted every one to two years. This process could provide assurance of independent reviews and allow stakeholder input into the process, which also provides additional credibility to the department's efforts. Additionally, these evaluations could formally document results of weed management efforts and provide baseline information for future weed management efforts.

The results of the evaluations could be provided to the department's Noxious Weed Management Advisory Committee and reported to MDA's state weed management coordinator. This would help not only improve weed inventory, monitoring, and evaluating procedures, but also make their process more accountable to the public and the legislature. Department officials indicated this process could be a good management tool.

RECOMMENDATION #3

We recommend the Department of Fish, Wildlife and Parks strengthen weed management by:

- A. *Conducting on-site evaluations of state parks and fishing access sites to determine the effectiveness of its weed control efforts and to verify compliance with statewide and regional weed plans.*
 - B. *Incorporating the results of these on-site evaluations into reports to the Department of Fish, Wildlife and Parks Noxious Weed Advisory Committee and the Montana Department of Agriculture.*
-

Improving Weed Management Communication and Coordination

The division reserves some maintenance funds for unexpected regional expenses such as repairing vandalism and controlling weeds. However, some regional personnel seemed unaware of the availability of these funds for supplementing planned weed control costs or hesitant to request additional funds when needed. For example, if county personnel identify weeds later in the season, county personnel may return to the state park or FAS for additional weed control efforts. County weed officials said they have set contracts and there is no discussion about reimbursements for additional weed control efforts on an as-needed basis. Audit work indicates there may be a breakdown in communication in some areas between Helena headquarters personnel and regional personnel. According to division management, regional staff need to inform division management about the need for additional weed resources. Also, it appears there is no formal process or procedure for regional personnel to request supplemental funds from this reserve for unexpected weed control costs, or a process for division management to set priorities for disbursing reserve funding.

RECOMMENDATION #4

We recommend the Department of Fish, Wildlife and Parks:

- A. *Educate and communicate to regional managers the availability of supplemental funds for unexpected weed control costs.*
 - B. *Establish a process for requesting and disbursing reserve funds.*
-

Weed Inspections Required Prior to Acquiring New State Parks and FAS

Before acquiring new lands, section 7-22-2154 (1), MCA, requires nonfederal government agencies, such as the department, to obtain a weed inspection by the county weed district. Section 7-22-2154 (2), MCA, indicates if the county district determines noxious weeds are on the property, the seller or purchaser are required to develop a weed management agreement to ensure compliance with district noxious weed management programs. According to a county weed district official, the purpose of the statute is to ensure nonfederal governments identify weed infestations and have a plan and resources available to manage weeds in accordance with county weed plans.

To test division compliance with this statute, we interviewed department personnel involved with land acquisitions and reviewed available acquisition documentation. Audit work determined the department is not complying with this law. Parks Division management stated they were unaware of this state law, which was passed by the 2005 Legislature. Division management stated weed conditions on proposed acquisitions is a division concern. The division prepares an environmental assessment (EA) for all proposed acquisitions, which includes assessing existing weed conditions and management needs. While the EA process addresses weed conditions on proposed land acquisitions, it is completed by department personnel, not by the county weed district, and does not comply with the law. The EA process results in at least the perception these weed assessments are not independent. Additionally, department management stated it needs an independent observation of weed status on lands to be acquired.

Department management stated compliance with county weed district inspection requirements can be obtained during the acquisition process, which involves the Parks Division and Field Services Division. The Parks Division is responsible for identifying lands for potential state parks and FAS. The Lands Section within the department's Field Services Division is responsible for negotiating lands approved for acquisition. Then, once proposed lands are acquired, the Parks Division is responsible for managing the properties, including weed management. However, there is no formal process ensuring the division or Lands Section obtain the required county weed official inspection. Additionally, there is no formal process for requesting county weed officials to complete inspections or document the results of weed inspections.

The department agreed they need to comply with state law and stated this is a procedural issue. Department management stated the issue would be best resolved by having the Lands Section verify county weed inspections are completed before finalizing acquisition of lands for new state parks and FAS.

RECOMMENDATION #5

We recommend the Department of Fish, Wildlife and Parks ensure weed inspections by county weed district officials are obtained and documented to comply with section 7-22-2154(1), MCA.

DEPARTMENT OF FISH,
WILDLIFE AND PARKS

DEPARTMENT RESPONSE



Montana Fish, Wildlife & Parks

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Ref: DO557-08
November 25, 2008

Angie Grove
Deputy Legislative Auditor
Legislative Audit Division
PO Box 201705
Helena, MT 59620-1705

RECEIVED

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LEGISLATIVE AUDIT DIV.

Dear Ms. Grove:

The Montana Department of Fish, Wildlife & Parks (FWP) has reviewed the performance audit of Weed Management at State Parks and Fishing Access Sites (FASs) provided on November 20. FWP appreciates the opportunity to respond to the findings and the professional manner in which the audit was conducted.

The Department concurs with the audit findings that weeds are being managed and statutes are being followed. Additionally, we concur with the recommendations and respond as follows:

Recommendation #1: We recommend the Department of Fish, Wildlife & Parks prioritize and complete weed inventory efforts at all state parks and fishing access sites.

Concur. The Department has a high priority on weed management but can increase the formality of weed inventory at both state parks and fishing access sites. An improved system of weed inventory will be developed and receive fiscal priority in work plans for fiscal year 2010.

A more formal corrective action plan will be submitted following the LAD committee hearing.

Recommendation #2: We recommend the Department of Fish, Wildlife & Parks require the seven administrative regions update regional weed plans in the next year to assure compliance and consistency with the department's statewide weed management plan.

Concur. The Department has held off updates to existing regional weed plans until the statewide plan was completed in 2008 to assure alignment. Now that the statewide plan is complete, regions can update in the next year.

Recommendation #3: We recommend the Department of Fish, Wildlife & Parks strengthen weed management by:

A) Conducting on site evaluations of state parks and fishing access sites to determine the effectiveness of its weed control efforts and to verify compliance with statewide and regional weed plans.

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November 25, 2008
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B) Incorporate the results of these on site evaluations into reports to the Department of Fish, Wildlife and Parks Noxious Weed Advisory Committee and Montana Department of Agriculture.

Response:

A) Concur. The Department will establish more formal evaluation processes by which weed management practices can be evaluated at sites throughout the system on a rotating basis to assure effectiveness. This will be addressed by the Noxious Weed Advisory Committee, addressed in regional weed management plan updates and implemented.

B) Concur. The Department will incorporate results or a summary of the effectiveness reviews into reports to improve communication as recommended by the existing Noxious Weed Advisory Committee.

Recommendation #4: We recommend the Department of Fish, Wildlife & Parks:

A) Educate and communicate to regional managers the availability of supplemental funds for unexpected weed control costs.

B) Establish a process for requesting and disbursing reserve funds.

Response:

A) Concur. While some level of knowledge exists currently, additional communication and education of fiscal resources available for weed control will be provided to all staff by May of 2009.

B) Concur. Existing processes will be reviewed and strengthened, as necessary to address any communication shortfall or competing interests that arise by May of 2009.

Recommendation #5: We recommend the Department of Fish, Wildlife & Parks ensure weed inspections by county weed control officials are obtained and documented to comply with section 7-22-2154(1), MCA.

Concur. Compliance with the statute will be improved immediately and documented either through reference in the environmental assessment and in files associated with lands being acquired.

Sincerely,

A handwritten signature in black ink, appearing to read "Joe Maurier", with a stylized flourish at the end.

Joe Maurier
Acting Director